

### **Abstract**

A method for providing a labeled target protein or labeled target peptide in high purity, which method comprises the steps of

a. contacting a chemical molecule, which chemical molecule comprises a target protein or a target peptide residue beside amino acid residues, spacer residues, and/or linker residues, an affinity tagging residue, and a labeling residue which labeling residue may be detected by physical means,

with an affinity support, to obtain said chemical molecule bound to the affinity support via the affinity tag of the affinity tagging residue,

b. removing impurities in the reaction mixture surrounding the affinity support to which the chemical molecule according to step a. is bound, and

c. cleaving or eluting said chemical molecule from said affinity support;  
and compounds useful in such method.

Such method is e.g. useful for (ultra) HTS-screening, especially spectroscopic HTS systems at single molecule resolution.